Effect on Multicultural Interaction on International Students

Taeko Sakurai

B.A. (Psych) (SUT) Grad Dip Sci (Psych) (USyd) M. Psychology

(Counselling Psychology) (SUT)

Abstract

Previous studies have indicated that local/international students

intervention programs are beneficial in order to help international students

make local friends (e.g., Ward et al 2001). However, no study was found

which assessed the effect of multicultural interactions such as activities for

international students. The aim of the present study was to examine the

effect of a bus excursion on international students. Ninety six international

students from 12 countries completed surveys one month and four months

after the bus excursion. Results found that students who participated in the

program tended to have a greater number of overall friends particularly local

(Australian) friends, showed decrease in their Asian identity, and

maintained both home culture maintenance and local culture recognition.

These results suggest that they are better adjusted in their new environment.

It was concluded that education providers are encouraged to organise greater

numbers of such multicultural intervention programs for international

students.

The number of international students studying in Australia is expanding every year. In 2004, the growth increased about 10 % from the prior year. More than 125,000 international students were enrolled in Australian Universities. That accounts for approximately 17% of the university student population and the majority of these international students are from Asian countries (IDP Education Australia Limited, 2005).

Charles and Stewart (1991) stated that universities need to help international students in two critical areas: help them to adjust into their academic programs and help them to achieve academic success. Needless to say, the students' primary objective is to obtain academic achievement, yet it is important to adjust to student life in order to complete their study. In general, international students experience more difficulty in their transition than local students (Kaczmarek, Matlock, Merta & Ames, 1994; Stoynoff 1996, 1997), because it tends to be difficult for them to find appropriate resources for assistance.

There are a number of studies in the area of students' adjustment during cross-cultural transitions (e.g., Ward, Bochner & Furnham, 2001). Ward (1996) stated that there are psychological adjustments and sociocultural adjustments. Psychological adjustment can be seen as well-being, and it can be measured by depression or mood change. Sociocultural

adjustment is the "ability to fit in" (Ward et al., p42), and it can be determined by the amount of difficulty experienced in the performance of daily tasks. Factors affecting psychological and sociocultural adjustment have been explored by previous studies (e.g., Searle & Ward 1990; Ward & Kennedy 1993a).

Searle and Ward (1990) assessed depression (psychological adjustment) and social difficulty (sociocultural adjustment) in 105 international students in New Zealand and found that satisfaction with relationships with host nationals, extraversion, life change, and social difficulty are factors affecting psychological adjustment; and cultural distance, expected difficulty and depression predict sociocultural adjustment. Similarly, Ward and Kennedy (1993b) studied the adjustment of 178 New Zealand secondary students while they were attending overseas cultural exchange programs, and homesickness, external locus of control, life changes, and social difficulty were related to psychological adjustment (profile of mood state); and cultural distance, language ability, satisfaction with host national contact, cultural separation and mood disturbance were the predictors of sociocultural adjustment (social difficulty). These results suggest that social support is an important component of psychological adjustment and that learning necessary skills for a new culture is an essential factor for sociocultural adjustment. These two aspects are related

each other (Ward & Kennedy). Individuals' interactions with others may play an important role in their adjustment.

The functional model of friendship network was described by Bochner, McLeod and Lin (1977). They claimed that international students have three social groups, co-national, multinational and local friends. Co-national friends are friends from the same country of origin, multinational friends are other international friends and local friends are friends from the host country. International students tend to have different relationships with each of these groups of friends: personal relationships with co-national friends, recreational and social relationships with multinational friends, and academic and professional relationships with local friends. In other words, international students tend have intimate relationship with their co-national friends and maybe with their multinational friends up to some extent, yet their relationships with locals are somehow distant and instrumental. Previous studies suggest that satisfaction with co-national friends is related to students' psychological well-being (Ward & Searle, 1991); greater number of local friends is associated with decreasing cultural stress (Olaniran, 1993); and both positive and negative results were found in the relationships with multinational friends (Ward et al. 2001).

According to Bochner, et al. (1977), international students tend to report that their best friend is a co-national friend. People who have similar backgrounds share the same values, and their mutual understanding makes them empathetic with each other (Ward et al., 2001), hence it is easy for them to become best friends. This support from co-nationals enhances international students' psychological well-being (Ward & Kennedy, 1993a). In their study of Malaysian and Singaporean international students in New Zealand, they have measured international students' mood and feelings which are some of the characteristics of culture shock. They found that satisfaction with co-national relationships were significantly related to their sociocultural adaptation; students who are satisfied with their co-national friendships are experiencing less culture shock hence better psychological adjustment. Moreover, Adelman (1988) stated the advantage of co-national friends as informative benefit: their similar experience enables them to share information about knowledge based resources and strategies for dealing with the new culture. Furthermore, Church (1982) claimed that co-national support also enhances the feeling of "belonging" and provides psychological security, which contributes to a reduction in stress and anxiety. In addition, international students tend to report the largest number of friends within their co-national group (Ward et al.), they are likely to have stronger friendship with co-nationals than friends from other countries (Furnham &

Alibhai, 1985), and the amount of co-national contact is related to international students' psychological well-being (Searle & Ward, 1990).

This qualitative and quantitative profile of co-national relationships influences international students' ethnic identity. Co-national interaction requires individuals to use their native language. Studies indicate that greater contact with their co-national group suggests stronger cultural identity (Ward & Kennedy, 1993a; Ward & Searle, 1991), because as Ward et al. (2001) claimed (their native) "language may serve as a symbol of identity and a route to positive distinctness and status" (p109) among people within co-national companionship group. Altrocchi and Altrocchi (1995) stated that interactions with co-nationals also enhance the maintenance of heritage identity. And previous studies indicate that a strong co-national identity is related to psychological well-being (Ward & Kennedy 1994; Ward & Rena-Deuba, 1994), and good understanding of their ethnic identities relate to better adjustment (Poyrazil, 2003).

However, some studies have pointed out the danger of co-national groups. As mentioned above, interaction with co-national friends advances stronger ethnic identity. Strong cultural identity causes more co-national contact, and fosters maintenance of their original culture. As a result, it may prevent individuals from learning more about the host culture and

integrating into the host society. This pattern of cultural identity (high heritage culture identity and low host culture identity) is defined as separation by Berry's (1990) categorical model of acculturation, and individuals categorised as separate tend to experience more stress and sociocultural difficulties than others (Ward et al., 2001).

Acculturation is the change individuals experience as a result of contact with another cultural group (Ward et al., 2001). Berry (1990) stated that adopting host culture and maintaining heritage culture are two fundamental components of acculturation, and determined individuals' degree of these components by measuring host culture identification and heritage culture identification. According to Berry, these two main axes result in four categories of acculturation: marginalisation, separation, assimilation and integration, which compose the categorical model of acculturation. Marginalisation is low host culture identification and low heritage culture identification. Individuals belonging to this category feel that they do not belong to either of the cultures. Separation is low in host culture and high in heritage culture, which means individuals reject host culture influences and stay in their heritage culture. The third, assimilation is high host culture and low heritage culture, where individuals adopt the host culture and reject maintenance of their original culture. The last category is integration, which describes the status where both cultural

identifications are high, indicating that individuals accept the host culture as well as maintaining their heritage culture, and this is the best strategy for well-being (Ward et al., 2001).

Therefore, it is also important to adopt at least some host cultural identification. In order to increase host culture identity, increasing exposure to the host culture is beneficial (Mendoza, 1989). Mendoza claims that when an individual interacts with a culture, the resistance to that culture decreases and it may increase the opportunity for cultural shift to occur. Interaction with local friends provides international students with an opportunity to learn about the host culture, hence they are smoothly introduced to local culture and experience fewer academic problems (Pruitt, 1978; Stoynoff 1996, 1997), fewer social difficulties, and improved communication (Ward & Kennedy 1993a). Consequently international students adjust better socioculturally, because benefits can be seen as predictors of sociocultural adjustment. Ward and Kennedy (1994) studied 98 foreign workers' acculturation, social difficulty and depression and found that individuals with strong host national identification experienced less sociocultural adjustment problems. Likewise, Ward and Rana-Deuba (1999) revealed that strong host national identification was related to better sociocultural adaptation in their study of 104 foreign residents in Nepal.

Strong host culture identification can be seen in assimilation or integration individuals, and although Berry (1990) argues that integration is the ideal, some studies suggest that assimilation is the natural process of acculturation (Ward et al., 2001). Hence high host cultural identification leads to positive outcomes in international students' adjustment.

Despite positive consequences, international students make fewest local friends among the three social network groups. Previous researchers have indicated that international students are willing to make local friends, yet it is difficult (e.g. Diss 2003; Ward et al., 2001). One of the reasons for their difficulty may be explained by their friendship orientation. Pham (2003) initiated the concept of relationship establishing orientation (REO) and relationship maintaining orientation (RMO) in his study. REO is the friendship tendency which indicates orientation towards relationship formation and RMO is the orientation towards maintaining existing relationship. He found that European Americans tend to form new social relationships while Asian Americans tend to maintain existing relationships. Since the majority of international students in Australian Universities are from Asian countries (IDP Education Australia Limited, 2005), they may be busy maintaining their existing relationships rather than establishing new ones, and that may be preventing them from actively making local friends (Diss).

Diss (2003) maintained that friendship patterns may be potential factors preventing international students from socialising with local friends. In her study of international students' social ties, she had attempted to illustrate their friendships. She found that international students who scored high in REO tend to have more multinational friends than those who scored lower in RMO, and those who scored low in RMO had more co-national and less local friends than others. In addition, she also measured the density of their social ties, which is the proportion of people in their social network who know one another. The result of her study suggested that international students' social networks consist of co-national and multinational friends; their co-national and multinational friends tend to know each other; but their local friends are less likely be friends of their co-national and multinational friends. Diss concluded that the relationship maintaining nature of Asian students fosters their international student friendships (co-national and multinational friendships), and local friends are left out of their circle which decreases the chance of meeting new local friends. Ward et al. (2001) claim that cultural distance plays an important role in making local friends. The ability to interact with local students largely depends on the cultural similarity between the host country and international students' country of origin. In their example, they report study of Redmond and Bunyi (1993) which found British, European and South American students were better

integrated in to American society than Korean, Taiwanese and Southeast Asian students.

In order to overcome these factors and facilitate international/local interactions, intervention programs are beneficial (Ward et al., 2001), yet only a few researchers have investigated the effects of such programs. Abe, Talbot and Geelhoed (1998) paired 28 new international students with local mentors, and encouraged them to interact, as well as invite them to monthly campus activities throughout the semester. The results indicate that program participation improved international students' interpersonal skills, which lead to better self-assessed social adjustment than non-participants. Westwood and Baker (1990) reported a longitudinal study on the effect of peer-pairing programs over a four year period in order to explore the relationship between academic achievement, drop-out rates and aspects of social adjustment. They found that program participants had higher achievement rates, and lower drop out rates than non-participants, and their friendship preference inclined to locals rather than co-nationals. These intervention programs enhanced openness to international-local relationship (Nesdale & Todd, 2000), indicating that their friendships had progressed from distant instrumental relationships to personal relationships.

However, previous intervention programs were typically based in halls of residence (e.g., Nesdale & Todd, 2000) or used reasonably small samples (e.g., Abe et al., 1998; Geelhoed, Abe, & Talbot, 2003) due to the difficulty of recruiting local students. Geelhoed et al. investigated the effect of cross-cultural interaction on American local students and found that the majority of local participants already had international exposure prior to the program. These local students participated in the program because they were interested in other cultures and were keen to make friends from overseas countries. In general, local students are not actively trying to socialise with international students due to their prejudice against foreign students (Ward & Kennedy, 1993b). When the number of local students who have international experience is much fewer than the number of international students who are willing to meet local students, local participant numbers have to be expanded to include those who have no intrinsic motivation to meet international students. Recruitment of such local students is unrealistic. It is difficult to organise an efficient local-international intervention program, if the number of local volunteers is significantly smaller than the number of international student participants.

Instead, multicultural interventions are more popular programs in international education. Many universities hold functions for international students such as international student orientation sessions and international

student bus excursions. Participants of these activities are only international

students, thus these function for international students can be seen as

multicultural intervention programs. Although Bochner et al. (1977)

suggest the importance of interaction with multinational friends, no studies

were found which assessed the effect of such multicultural interactions.

Within such multinational groups, people speak in English with each other

because their common language is English, and their common topic would

be likely to be something they share at that moment, local (Australian)

culture. As mentioned above, more introductions to the local culture lead to

lower cultural resistance (Mendoza, 1989). Therefore, intervention

programs with multinational students may foster the students' local culture

awareness, which should lead them to better adjustment. At the same time,

greater exposure to local culture leads to a shift in their cultural identities

and lowers their home culture maintenance (Mendoza, 1989).

The first aim of the present study was to examine the effect of a bus

excursion on international students by sampling them on two occasions after

their excursion. If multicultural interventions bring positive effects,

education providers could be encouraged to hold more "international group

programs", which tend to be easier than organising local-international

intervention programs. A bus excursion was chosen because bus travel is a

simple means of transportation as well as providing students space and

opportunity to meet without forcing them to disclose. Furthermore, the destination of the excursion was decided to th e Australian native animal sanctuary because that can be seen as a kind of introduction to the local culture.

It was hypothesised that 1) Bus excursion participants would gain more friends overall than non-participants; 2) Bus excursion participants would gain more multicultural friends than non-participants; 3) More friendships with these multicultural friends would proceed to a personal level, not just a social friendship, for participants, compared to non-participants; 4) Since the majority of participants come from a variety of Asian countries, bus excursion participants would have higher overall Asian identity than non-participants; and 5) Bus excursion participants would have higher recognition of local culture than non-participants, and bus participants' home culture maintenance would decrease as their local cultural recognition increase.

In addition to the effect of the bus excursion, the nature of the students' friendship was also examined. Students who was motivated to make new friends may choose to participate in such a bus excursion, thus 6) Bus excursion participants would have higher relationship establishment orientation (REO) than non-participants. Friendship patterns may also

reflect their number of friends, and cultural orientation. It was hypothesised that 7) Regardless of bus participation, students who have their friendship orientation towards maintaining existing relationship (RMO) would make fewer friends than students who have the orientation towards relationship formation (REO). Moreover, students high in RMO try to maintain their old friendships, hence they might prefer to obtain up-to-date information from their home culture. On the other hand, REO students tend to explore new friendships, and their enterprising spirit may lead to their active local culture recognition. It was also hypothesised that 8) Students high in RMO tend to have higher home culture maintenance and REO students tend to have higher local culture recognition.

Method

Participants

There were 98 participants, 47 male and 51 female. The mean age of the sample was 23.6years (SD=3.80), one age not reported. The mean years staying in Australia was 0.9 years (SD=1.0). They are from 12 different Asian countries. They were first year International students of Swinburne University of Technology Higher Education sector. They received $20 in return for their participation.

Materials

      Participants completed two questionnaires. One was completed one month after the excursion and the other three months after the first survey. Questionnaires consisted of demographic information, questions about the number of friends, their view on their Asian identity and their cultural orientation and other questions, since this study was part of a larger study.

      The complete questions for these items are included as Appendix A (first questionnaire) and Appendix B (second questionnaire).

      Question about Social Ties   The Social Tie chart designed by Diss (2003) was administered. Participants were asked to list names of people they had met since their arrival in Melbourne. They were then asked six questions about each of these individuals: (1) is this person a member of your family?, (2) cultural background (Australian, same country as yours, other forign country, and don't know), (3) how psychologically close you feel? (1 = Not close at all and 5 = Extremely close), (4) social, personal or academic relationship? (5) how long does this person live in Australia? (-1 = shorter than you, 0 = as long as you, 1 = a little bit longer than you, and 2 = much longer than you), and (6) if you participated in the bus excursion, was this person on the excursion bus? The following section asked participants to indicate which of the people knew each other using the table.

Asian Identity Scale　　This scale was adapted from Kashima, Kashima and Hardie's (2000) self-typicality and group-identification scale. Items were used to assess students' Asian identity.　Participants rated each item on a 7-point scale (1 = Does not describe me / It is not true of me and 7 = It describes me / It is very true of me).　A typical item is "I am proud to be an Asian student".　The authors of the original scale claimed good reliability and validity.

Cultural Orientation Scale　　This scale was designed for this study to determine how well students learn about Australian culture (e.g., Listen to Australian radio) and maintain their culture of origin (e.g., Follow current top 10 songs in my country).　In consultation with supervisor, items were generated into 24 individual sentences, each of which was answered on a 5-point scale (1 = Not at all and 5= very important).　There were 24 items in the first questionnaire, however as a result of Factor Analysis, the scale was reduced to 15 for the second questionnaire.

Relationship Orientation Scale　　　Pham's (2003) Relationship Orientation Scale was used in order to explore individuals' friendship orientation; whether they tend to form new social relationships or maintain existing relationships.　There were five items for orientation towards relationship formation (relationship establishing orientation, REO) and four

items for orientation towards maintaining existing relationship (relationship maintaining orientation, RMO). An example of the REO was "how often do you try to meet new people?" and an example of the RMO was "how important it is to you to maintain relationships with people who you have known most of your life?". Each statement was rated in a seven-point scale (1 = never/not at all and 7 = Always/Very much). A higher score reflected a stronger tendency to establish new friendship and to maintain existing friendships. Pham reported adequate internal consistency and reliability.

Procedure

During the bus excursion held as a part of an orientation program for newly arrived international students, a series of ice breaking activities were implemented on the way to the Australian native animal sanctuary (about one hour travel). Potential participants were recruited at the end of the excursion using a flyer (Appendix C). Potential non-bus-excursion-participant volunteers were also recruited during the international orientation program using the same flyer. Students who were interested in participating in this study were asked to leave their contact details (email and phone number) with the researcher, and they were invited to complete the first questionnaire one month after their orientation program (fifth teaching week). Three months after the first survey (last week of their first semester exam period), they were asked to complete the second

questionnaire. Questionnaire1 and questionnaire 2 were matched by initials
of participants.

Results

The data was analysed using SPSS 12.0 for Windows. Data was
examined for out of range and missing values, the latter being replaced with
the mean of the rest of the items in recognized scales. A series of t-tests and
cross-tabulations indicated that there were no systematic difference between
those who participated in the bus excursion and those who did not in terms
of age, years in Australia, IELTS score, gender, marital status, country of
origin, housing arrangement, previous study overseas, course enrolled, or
academic status.

Social Ties

A multivariate repeated measures MANOVA was calculated with
bus category as a between subject measure, and time, culture of friends and
types of relationships as repeated measures. The dependent variable was
number of friends. Means and standard deviations of number of friends by
cultural background and types of relationship are shown in Table 1.

Table 1

Means and Standard Deviations of Number of Co-national, Multinational and Local Friends at Time 1 and Time 2 by Their Relationship for Bus Excursion Participants and Non-Participants

Culture and type of Friendship	Non-Participant (*n* = 51)		Participants (*n* = 47)	
	Time 1 M (SD)	Time 2 M (SD)	Time 1 M (SD)	Time 2 M (SD)
Co-National Friends				
Personal Relationships	3.37 (2.61)	3.92 (2.93)	3.89 (3.39)	5.06 (5.07)
Social Relationships	3.86 (3.64)	5.41 (5.26)	3.98 (4.28)	5.38 (5.40)
Academic Relationship	2.04 (2.16)	2.94 (2.85)	1.85 (2.33)	3.13 (3.06)
Co-National Total	9.27 (4.14)	12.53 (6.09)	10.19 (4.55)	14.21 (6.66)
Multinational Friends				
Personal Relationships	.92 (1.66)	1.22 (2.58)	.68 (1.32)	1.17 (1.98)
Social Relationships	1.63 (2.05)	2.37 (2.95)	1.68 (2.07)	2.81 (3.15)
Academic Relationship	2.39 (2.32)	4.27 (2.89)	1.77 (1.98)	3.60 (3.37)
Multinational Total	4.94 (3.22)	7.94 (4.77)	4.32 (3.00)	7.87 (5.04)
Local Friends				
Personal Relationships	.65 (1.23)	.86 (1.77)	.55 (1.44)	.89 (2.48)
Social Relationships	1.27 (2.00)	1.71 (2.56)	.53 (1.04)	1.36 (1.95)
Academic Relationship	.84 (1.24)	1.45 (1.86)	.60 (1.04)	1.68 (2.10)
Local Total	2.76 (2.98)	4.02 (4.08)	1.74 (2.33)	4.00 (4.12)
Total Friends	16.98 (4.46)	24.16 (7.77)	15.53 (5.93)	25.09 (9.87)

There were no 3-way or higher interactions involving bus category which were significant. However, there was a significant time x bus category interaction, Wilk's Lambda = .93, F (1, 96) = 4.07, p<.05. Although there was no significant difference between participants and non-participants at either time, the participants' number of friends increased significantly more than the number of non-participants' friends.

Further, each category (total number of friends in each culture, total number in each type of relationships and each type of relationships by each culture) was analysed separately. Although there was no bus category x time x culture of friends x types of relationships interaction in the MANOVA, when number of Australian friends was analysed separately, a time x bus category interaction did emerge, Wilk's Lambda = .95, $F(1, 96)$ = 5.17, p<.05 indicating that the number of Australian friends increased more for participants than non-participants.

Asian Identity

Means and standard deviations of Asian Identity are shown in Table 2. A repeated measures ANOVA revealed a significant interaction between Asian identity and bus participation $F(92, 1)$ = 6.50, p < .05. Non-participants increased their Asian identity significantly from Time1 to Time 2, but participants slightly decreased their Asian identity.

Table 2

Means and Standard Deviations of Asian Identity at Time 1 and Time 2 for Bus Excursion Non-Participants and Participants

Group	Time 1 M (SD)	Time 2 M (SD)
Non-Participants (*n* = 51)	5.46 (1.18)	5.89 (.92)
Participants (*n* = 47)	5.24 (1.30)	5.11 (1.36)

Cultural Orientation

The cultural orientation scale, developed for this study, was subjected to maximum likelihood Factor Analysis in order to determine its suitability for further analysis. Oblique (oblimin) rotation was chosen because the factors were expected to be correlated. The Kaiser-Myer-Olkin (KMO) measured of sampling adequacy was moderate (.71), and Bartlett's test of Sphericity was significant, $\chi^2(276) = 872$, $p < .000$, indicating that the data was suitable for factor analysis. Given the sample size the significance level of factor loading was set at .40. Two clear factors emerged. The first factor accounted for 19.1% of the variance and consisted only of items of home linked items. The second accounted for 17.8% of the variance and consisted only of items of Australian linked items. Not all the items loaded significantly on either factor. Therefore, some of the items from the original 24 items of the home and local culture orientation scale were omitted and

the scale was reduced to 15 items for the second questionnaire. Six items for home culture maintenance and seven items for local culture recognition were used for analysis. A summary of the results of the factor analysis, with factor loadings, eigenvalues and percentages of variance for each of the variables, is presented in Table 3.

All scales were then checked for reliability. Means, standard deviations, theoretical ranges and Cronbach alpha reliabilities are shown in Table 4.

Table 3

Factor Loading, Eigenvalues, and Percentage Variance for Local Culture Recognition and Home Culture Maintenance Factors

	Factor Loadings	
Factor names and Items	1	2
F1: Local Culture Recognition		
Listen to Australian radio	.60	
Follow Australian current top 10 songs	.44	
Check the Australian major news of the day	.69	
Read Australian books or magazines for my spare time	.62	
Check the gossip of Australian celebrity	.47	
Read local newspaper	.67	
Ring or e-mail Australian friends	.60	
F2: Home Culture Maintenance		
Visit information website(s) from my country		.60
Listen to music from my country		.69
Follow current top 10 songs in my country		.90
Check the major news of the day in my country		.76
Check the major news of the day in my country		.48
Read local paper in my language		.48
Eigenvalues	4.57	4.28
% varience explained	19.06	17.83

Table 4

Means, Standard Deviations, and Ranges of Cronbach Alpha Reliabilities of Scales

Scale (Items)	Alpha	*M*	*SD*	Score Range
Asian Identity Time 1 (5)	.84	5.34	1.24	1 - 7
Asian Identity Time 2 (5)	.86	5.53	1.19	1 - 7
Home Culture Maintenance Time 1 (6)	.80	2.70	.77	1 - 5
Home Culture Maintenance Time 2 (6)	.82	2.83	.87	1 - 5
Local Culture Recognition Time 1 (7)	.81	3.07	.71	1 - 5
Local Culture Recognition Time 2 (7)	.78	3.01	.68	1 - 5
REO Time 1 (5)	.74	4.61	.88	1 - 7
REO Time 2 (5)	.63	4.58	1.06	1 - 7
RMO Time 1 (4)	.80	5.56	.82	1 - 7
RMO Time 2 (4)	.71	5.33	1.02	1 – 7

N = 98

A repeated measures MANOVA was calculated with home culture maintenance and local culture recognition as dependent variables and bus

participation and time as independent variables. Means and standard

deviations of cultural orientations are shown in Table 5.

Table 5
*Means and Standard Deviations of Home Culture Maintenance and Local
Culture Recognition at Time 1 and Time 2 for Bus Excursion Non-
Participants and Participants*

	Home Culture Maintenance		Local Culture Recognition	
Group	Time 1 M (SD)	Time 2 M (SD)	Time 1 M (SD)	Time 2 M (SD)
Non-Participants (*n* = 51)	2.64 (.74)	2.79 (.76)	3.15 (.67)	2.96 (.73)
Participants (*n* = 47)	2.77 (.81)	2.87 (.83)	2.99 (.74)	3.06 (.63)

There was a marginally significant 3-way interaction, Wilk's

Lambda = .96, $F(94, 1) = 3.82$, $p = .053$. In the non-participants group,

home culture maintenance increased from Time1 to Time2 (marginally

significant), and local culture recognition decreased significantly from

Time1 to Time2, $t(50) = 2.29$, $p < .05$. In the participants group, home

culture maintenance and local culture recognition remained constant from

Time1 to Time2.

Relationship Orientation

Using median splits on scores on RMO and REO at Time 1,

respondents were categorised on either high REM (above median on RMO

and below median on REO) or high REO (above median on REO and below median on RMO).

A repeated measures ANOVA was calculated with total number of friends as dependent variables and time, bus participation and relationship orientations (RMO or REO) as independent variables. A 2 (RMO, REO) x (Participants, Non-Participants) ANOVA was calculated with the number of new friends they made as dependent variable. Means and standard deviations of number of friends are shown in Table 6.

Table 6
Means and Standard Deviations of Total Number of Friends at Time 1, Time 2 and New Friends for Relationship Establishing Orientation and Relationship Maintaining Orientation for Bus Excursion Non-Participants and Participants

	Participants		Non-Participants	
	RMO ($n = 7$)	REO ($n = 18$)	RMO ($n = 11$)	REO ($n = 12$)
	M (SD)	M (SD)	M (SD)	M (SD)
Time 1	15.43 (4.93)	14.67 (5.70)	17.18 (4.96)	17.92 (4.54)
Time 2	21.86 (10.79)	25.00 (10.34)	23.64 (8.99)	26.75 (7.28)
New Friends	6.43 (7.18)	10.33 (6.02)	6.45 (5.99)	8.83 (5.69)

In the first ANOVA, there were no 3-way interactions between bus category and relationship orientation. The number of friends increased from Time1 to Time2 (not significantly) for both RMO and REO students and for

bus participants and non-participant groups. Furthermore, in the second ANOVA, there were no interactions between bus category and relationship orientation. There was no relationship between the number of new friends, relationship orientation and excursion participation.

Pearson product moment correlations were calculated in order to examine the relationship between relationship orientation and cultural orientation. There was significant relationship between REO 1 (Relationship Establishment Orientation at Time 1) and Local culture recognition at Time 1 ($r = .29$, $p < .01$). Students who showed higher relationship establishment orientation at Time 1 tended to have stronger local cultureal recognition at Time 1. No other relationships were found between relationship orientation and cultural orientation.

Discussion

The first aim of this study was to explore the effect of a multicultural intervention program on international students. Three areas were investigated: quantity and quality of students' social ties, their Asian identity, and their local cultural recognition and home culture maintenance. Then, the nature of the students' friendship was explored though relationship orientation.

Social Ties

The first hypothesis was that the bus excursion participants would gain more friends overall than non-participants. This hypothesis was supported. Although the number of friends before and after the excursion was not significantly different between the groups, the bus participants gained more friends from the first to the second data collection time. This was in line with the previous study of Westwood and Baker (1990). They suggested that a local/international intervention program is effective for increasing the number of friends for international students. In the current study, the intervention program was held among international students, and this form of intervention was also helpful in increasing friendships for international students.

One of the reasons for increasing friendships may be that the bus excursion might have given newly arrived students the chance to "rehearse" their social conversations in English. Newly arrived international students have limited experiences of social situations in Australia, therefore they have had very few opportunity to participate in English conversations. Without reasonable experience of using English in social conversations, international students may be anxious when talking to native speakers (local Australians) for fear of making language mistakes. Talking to non-native speakers (multinational students) in a protected environment (in the bus)

may reduce this anxiety, and talking to non-native speakers may be easier than talking to native speakers, when they don't have much experience in English conversation. After experiencing the bus excursion, participants might have gained some confidence in speaking in English, this may lead them to expand their social circle and hence the number of friends they made improved.

Another reason the bus excursion participants may have gained more friends is that they may have been more extraverted in general than those who didn't choose to be involved. The nature of participants will be discussed in a later section in more detail with regard to their relationship orientation.

Nevertheless, both participants and non-participants groups made friends over time. The results suggest that although participants made more friends than non-participants, both groups are getting adjusted to their new situation in Australia.

However, the second and the third hypotheses were not supported. Bus excursion participants were expected to gain more multinational friends than non-participants. The excursion was a "multicultural intervention program", and the participants would have been exposed to multinational

students which would assist in enhancing their familiarisation with these students. Their number of multinational friends was expected to increase. Furthermore, this familiarisation was expected to affect participants' quality of relationships; participants' friendships with these multinational friends were expected to proceed from an "instrumental level" to a "personal level". Yet no relationships were found between the bus participants, their number of multinational friends, and the types of relationships.

This was a little surprising, since international students might be expected to have more in common with other international students, regardless of nationalities. However, it is possible that students may have put more effort into making friendships with local students in order to fit into the Australian culture. Support for this possibility is confirmed by the fact that the bus participants gained more local friends than non-participants.

In Diss's (2003) international students' friendship study, she found that international students felt closeness to both co-national friends and multinational friends, yet closeness of multinational friends was only slightly higher than that of local students. She also confirmed that although co-national friends tend to be personal friends, multinational friends seem only instrumental friends; i.e., the relationships between multinational students may be superficial. Barker, Child, Gallois, Jones & Callan. (1991)

also reported that Asian students tend to find it difficult in establishing friendships and extend those relationships to intimate level. These findings may suggest a difficulty of improving the quantity and quality of multinational friends for international students beyond the intervention program. Although the cultures of Asian countries seem closer to each other compared to non-Asian cultures, each Asian country has different cultures. The cultural differences among Asian cultures may be larger than expected, and that may bear difficulty in interconnecting each other. Language may also contribute to this difficulty. International students use English to communicate, yet it may be difficult to understand each other when strong accents exist. Difficulty understanding the other party may prevent them to have more complicated conversations, hence their relationships stay on a surface level.

In addition, the intervention program held for this study might not be effective. It was only a one day program, and ice-breaking activities were administered only in the bus on the way to the destination, which was only about one hour. Although bus participants seemed to be exchanging conversations throughout the day, previous studies have tended to organise a series of intervention sessions (eg., Abe et al., 1998), and that might be one of the differences between this program and previous studies' programs. Structured follow up intervention sessions for bus participants might be

helpful for increasing students' awareness as "international students in an Australian university", and hence they might feel closer to each other. Moreover, some intervention programs typically employed "peer-matching" (eg., Westwood & Baker, 1990), which was not the case in this study. Peer-matching would enhance the relationship between paired individuals, and again it might be beneficial in intensifying the relationship between them.

As mentioned earlier, bus participants gained more local friends than non-participants from Time 1 to Time 2. One of the reasons may again be simply that they were more extroverted in general than non-participants. It may also be due to the effect of the "intervention program as a rehearsal", in that international students who gained confidence talking to others in English though the bus excursion might feel less anxious when socializing with local students which would help in increasing the number of local student friends.

Asian Identity

The scale assessing Asian identity provided to be highly reliable. There was a significant interaction between participation in the excursion and time. It indicated that the bus participants had a slightly lower level of Asian identity to start with, which they maintained over time. Whereas the non-participants actually increased their level of Asian identity over time.

This is contrary to what was predicted, since it was expected that bus excursion participants would feel that they are "Asians" more than non-participants would. Because the majority of participants come from a variety of Asian countries, it was expected that participants would feel a sense of "belonging" within a group of "Asian" students.

A possible explanation is that the students not participating in the excursion may be more reserved, and consequently socialised more with fewer friends in their own nationalities, which reinforces their Asian identity. This suggestion is slightly undermined by the fact that non-participants increased not only co-national friends, but also multinational friends and Australian friends between time 1 and time 2.

However, it was not possible to tell from the data whether the multinational friends were other Asians or a wide range of nationalities. The question asked to indicate friend's cultural background by choosing from four options; Australian, same country as yours, other foreign country, and don't know. The majority of international students in Australia are Asian students (Department of Education, Training and Youth Affairs, 2004), and the participants for the current study are from a wide range of Asian countries, thus it was assumed that multinational friends are Asian friends, but not all international students are Asians. In fact, some non-

Asian international students participated I the bus excursion. The participation of non-Asians in the excursion may decrease the perception that excursion was for Asian-students group. As a consequence, the participants may not identify themselves as being Asian students, despite the majority of Asian students on the bus. Moreover, the Asian Identity Scale was used in order to measure students' ethnic identity as "Asian students" in the present study. If friends from "other foreign country" are not Asians, the Asian Identity is not appropriate measurement.

It is also true that non-participants gained fewer Australian friends than the bus participants. It may be indicating that non-participants were experiencing more difficulties in their sociocultural adjustment. Ware et al. (2001) suggest that international students who are less culturally adjusted to a host country may perceive more unfairness. Hence, these non-participants may feel disadvantaged in Australia, which contributed to stronger Asian identities.

Cultural orientation

It was hypothesised that bus excursion participants would have a higher recognition of local culture than non-participants, because the common topic would be local (Australian) culture for people within multinational groups, hence it would enhance the students' local culture awareness. It was also hypothesised that the bus participants' home cultural

maintenance would decrease as their local cultural recognition increased due to the shift in their cultural identities. Here, once again, the score for the bus-participants on both home and local culture measures did not change and the score for the non-participants showed an increase in home culture maintenance and a decrease in local culture recognition at Time 2.

This result might suggest that non-participants may experience more homesickness, which is possible if they are more reserved and less likely to engage in social activities. When they experience homesickness, these students will think about their home country a lot and loose the capacity to pay attention to local current affairs. Thus their home culture maintenance will increase and local culture recognition will decrease. Alternatively, it may reflect non-participants friendship tendency. Non-participants may have more interaction with a restricted group of similar friends. Non-participants increased their Asian identity may be seen as a support for this statement. However, as mentioned in a previous section, the number of multinational and local friends increased for non-participants as well. This contradiction may be explained by the strength of the friendship; it is not possible to evaluate the strength of the friendship from the current study. Although non-participants increased the number of multinational and local friends from Time 1 to Time 2, their relationships with these friends may be

superficial, and non-participants may contact co-national friends more frequently and intimately.

According to Berry's (1990) categorical approach, people high in heritage culture identification and low in host culture identification are categorised as "separation", and these findings may suggest that they are suffering greater sociocultural acculturative stress than people who participated in the excursion.

On the other hand, the excursion participants gained significantly more local friends than non-participants. If international students have more contact with local students, their local culture recognition were expected to increase, yet, their home cultural maintenance and local cultural recognition were both maintained almost the same from Time 1 to Time 2. It may be explained that their friendship type remained instrumental. Such distant relationships did not require the knowledge of local culture, hence their local culture recognition did not increase.

Relationship Orientation

It was expected that students who choose to participate in such bus excursion would have higher relationship establishment orientation (REO) than non-participants. It was also expected that regardless of bus

participation, students who have their friendship orientation towards

maintaining existing relationship (RMO) would make fewer friends than

students who have the orientation towards relationship formation (REO),

and students high in RMO would have higher home culture maintenance

and REO students would have higher local culture recognition.

From this study, only one correlation was found between

relationship establishment orientation at Time 1 and local culture

recognition at Time1.   No other relationships were found between bus

excursion participation, relationship orientations, and number of friends, or

cultural relationships and relationship orientation.

The concept of relationship orientation invented by Pham (2003)

was described between Non-Asian and Asian students. Because the current

study was comparing relationship orientation among Asian students, the

difference between these students may have been too small to find any

difference. Using a median split was also problematic, since there were

many students whose response was at the mid-point of the scale in both

REO and RMO in Time 1 and Time 2.

However, there was no difference in friendship orientation between

bus excursion participants and non-participants, i.e. their attitude toward

making friends is comparable. In this case, the possibility of difference between participants and non-participants may be something beyond their friendship orientation. For example, it may be the difference in personality traits such as being extraverted or introverted.

Limitations

There are a number of fundamental limitations possibly affecting the findings in this study. First, the participants of this study came from a wide variety of Asian countries. Broader ranges of countries can be seen as a strength as well as a limitation, because there are not enough from any particular country to make national comparisons, that may be a weakness of the current study. Similarly, the sample size was limited.

Second, the representativeness of the sample can be seen as a limitation. Although there was no significant differences in their relationship orientation between participants and non-participants, people who actively participate in such bus excursion may have different personality traits (e.g. more extraverted than others) as previously mentioned. The nature of international students who participated in such a study may be more extraverted than students who choose not to participate. If that is true, the difference between bus participants and non-participants is not only whether they participated in the excursion or not, they may be

different types of people. This study did not measure personality traits, and it is suggested to be included in further studies.

Third, the concept of "friend" may confuse students when responding to the questionnaire. Church (1982) described the difficulties of defining social concepts such as "friends" in cross-cultural research. There is no clear line between "friends" and "acquaintances", and the borderline between them may differ between individuals, particularly from different cultures. As a result, the number of friends they reported may differ depending on their interpretation of "friends". To avoid such ambiguity, including a clear definition of "friends" may be effective in order to ensure participants' understanding of terms.

Implications and Future Direction

Although there were some limitations mentioned above, this study found some interesting results, which is beneficial for further research in this area. Despite the lack of support for the hypothesis in this study, it was found that international students who participated in the bus excursion gained more friends especially local friends. Second, their Asian identity and cultural orientation remained constant while non-participants increased Asian identity and home culture maintenance, and also decreased local culture recognition. These elements are defined as predictors for

psychological and sociocultural adjustment as noted in previous studies (e.g., Ward & Searle, 1991). Therefore, although the reason for this better outcome is not clear, participants can be seen as being better adjusted into their new environment.

It is also true that such a multicultural activity may have positive effect on international students. Hence educational institutions are encouraged to organise more intervention programs not only limited to local/international students, but also for international/international students.

However, more detailed, possibly qualitative questionnaires are needed in order to examine the development of international students' social ties within the multicultural environment. Since there was no previous study investigating multicultural intervention, this study presented a profile of the effects of such an intervention on friendships, however more detailed analysis such as measurement of strength of friendship, their personality and well-being is essential in future studies.

Conclusion

In conclusion, the present study explored the effect of a multicultural intervention program on international students, and the nature of international students' friendship toward other students. It was expected

that a positive effect would be found for students who participated in the excursion. Students who participated in the program tended to have a greater number of overall friends particularly local (Australian) friends within three months, showed decrease in their Asian identity, and maintained both home culture maintenance and local culture recognition. These are contributing factors for both psychological and sericultural adjustment to the international students, hence they are likely to be better adjusted in their new environment. Although the results did not support the hypothesis, the outcome of the multicultural intervention was positive. Therefore, education providers should organise greater numbers of such multicultural intervention programs since it is easier to attract international students than local students. At the same time, the education providers should put more effort into strategies promoting such excursions to students who are unlikely to participant in any "international" activity. Listing the benefits of participating in the program e.g., the ability to make friends, would be good promotional strategy.

References

Abe, J., Talbot, D. M. & Geelhoed, R. J. (1998). Effects of a peer program on international student adjustment. *Journal of College Student Development, 39, 539-547.*

Adelman, M, B. (1988). Cross-cultural adjustment: A theoretical perspective on social support. *International Journal of Intercultural Relations, 12, 183-205.*

Altrocchi, J. & Altrocchi, L. (1995). Polyfaceted psychological acculturation in Cook Islanders'. *Journal of Cross-cultural Psychology, 26, 426-440.*

Abe, J., Talbot, D. M. & Geelhoed, R. J. (1998). Effects of a peer program on international student adjustment. *Journal of College Student Development, 39, 539-547.*

Adelman, M, B. (1988). Cross-cultural adjustment: A theoretical perspective on social support. *International Journal of Intercultural Relations, 12, 183-205.*

Altrocchi, J. & Altrocchi, L. (1995). Polyfaceted psychological acculturation in Cook Islanders'. *Journal of Cross-cultural Psychology, 26, 426-440.*

Barker, M., Child, C., Gallois, C., Jones, E. & Callan, V. J. (1991).

    Difficulties of overseas students in social and academic situations.

    Australian Journal of Psychology, 43, 79-84.

Berry, J. (1990). Psychology of Acculturation. In R. W. Brislin (eds.),

    Applied cross-cultural psychology (pp.232-253). Newbury Park,

    CA: Sage.

Bochner, S., McLeod, B. M. & Lin, A. (1977). Friendship patterns of

    overseas students: A functional model. *International Journal of*

    Psychology, 12, 277-297.

Charles, H. & Stewart, M. (1991). Academic advising of international

    students. *Journal of Multicultural Counseling & Development, 19,*

    173-181.

Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin, 91,*

    540-572.

Diss, M. (2003). *The Development of International Students' Social Ties*.

    Unpublished postgraduate diploma thesis. Swinburne University of

    Technology, Victoria, Australia.

Furnham, A. & Alibhai, N. (1985). The friendship networks of foreign

    students: A replication and extension of the functional model.

    International Journal of Psychology, 20, 709-722.

Greenhoed, R., Abe, J. & Talbot, D. M. (2003). A quantitative investigation
of U.S. Students' experiences in an international peer program.
Journal of College Student Development, 44, 5-17.

IDP Education Australia Limited (2005*). International Education in
Australia. "International students in Australian Universities"
Semester 2, 2004 - Full Report.* Retrieved May 7, 2005, from
http://www.idp.com/research/fastfacts/Semester%20Two%202004%
20-%20Key%20Outcomes_Web.pdf

Kaczmarek, P. G.; Matlock, G. & Merta, R. (1994). An assessment of
international college student adjustment. *International Journal* for
the Advancement of Counselling, 17, 241-247.

Mendoza, R. H. (1989). An empirical scale to measure type and degree of
acculturation in Mexican American adolescents and adults. *Journal
of Cross-cultural Psychology, 20, 372-385.*

Nesdale, D. & Todd, P. (2000). Effect of contact on intercultural
acceptance: A field study. *International Journal of Intercultural
Relations, 24, 341-360.*

Olaniran, B. (1993). International students' network patterns and cultural
stress: What really counts. *Communication Research Reports, 10,
69-83.*

Pham, L. (2003). *Social relationship practices: An alternative account of
cultural differences in mentalities*. Paper presented at the 5th

Biennial Conference of the Asian Association of Social Psychology in Manila, Philippines.

Poyrazli, S. (2003). Ethnic identity and psychological adjustment among international students. *Psychological Reports, 92, 512-514.*

Pruitt, F. J. (1978). The adaptation of African students to American society. *International Journal of Intercultural Relations, 21, 90-118.*

Redmond, M. V. and Bunyi, J. M. (1993). The relationship of intercultural communication competence with stress and handling of stress as reported by international students. *International Journal of Intercultural Relations, 17, 235-254.*

Searle, W. and Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations, 14, 449-464.*

Stoynoff, S. (1996). Self-regulated learning strategies of international students: A study of high and low achievers. *College Student Journal, 30, 329-336.*

Stoynoff, S. (1997). Factors associated with international students' academic achievement. *Journal of Instructional Psychology, 24, 56-68.*

Ward, C. (1996) Acculturation. In D. Landis & R. Bhagat (eds), *Handbook of intercultural training* (pp. 124-147). Thousand Oaks, CA: Sage.

Ward, C., Bochner, S & Furnham, A. (2001). *The psychology of culture shock*. (2nd ed.). London: Routledge.

Ward, C. and Kennedy, A. (1993 a). Psychological and sociocultural adjustment during cross-cultural transition: A comparison of secondary students at home and abroad. *International Journal of Psychology, 28, 129-147.*

Ward, C. & Kennedy, A. (1993 b). Where's the culture in cross-cultural transition? Comparative studies for sojourner adjustment. *Journal of Cross-cultural Psychology, 24, 221-249.*

Ward, C. and Kennedy, A. (1994). Acculturation strategies, psycho logical adjustment and sociocultural competence during cross-cultural transitions. *International Journal of Intercultural Relations, 18, 329-343.*

Ward, C. and Rana-Deuba, A. (1999). Acculturation and adaptation revised. *Journal of Cross-cultural Psychology, 30, 372-392.*

Ward, C. and Searle, W. (1991). The impact of value discrepancies and cultural identity on psychological and sociocultural adjustment of sojourners. *International Journal of Intercultural Relations, 15, 209-225.*

Westwood, M. J. and Barker, M. (1990). Academic achievement and social adaptation among international students: A comparison group study

of the peer-pairing program. *International Journal of Intercultural*

Relations, 14, 251-263.